Mohammad A Behnajady

List of Publications by Citations

99 papers	4,368 citations	37 h-index	64 g-index
101 ext. papers	4,774 ext. citations	5.6 avg, IF	5.87 L-index

#	Paper	IF	Citations
99	Kinetic study on photocatalytic degradation of C.I. Acid Yellow 23 by ZnO photocatalyst. *Journal of Hazardous Materials*, **2006**, 133, 226-32	12.8	662
98	Kinetic modeling of photocatalytic degradation of Acid Red 27 in UV/TiO2 process. *Journal of Photochemistry and Photobiology A: Chemistry*, **2004**, 168, 39-45	4.7	184
97	A kinetic model for the decolorization of C.I. Acid Yellow 23 by Fenton process. *Journal of Hazardous Materials*, **2007**, 148, 98-102	12.8	162
96	Photocatalytic degradation of an azo dye in a tubular continuous-flow photoreactor with immobilized TiO2 on glass plates. *Chemical Engineering Journal*, **2007**, 127, 167-176	14.7	150
95	Investigation of the effect of different electrodes and their connections on the removal efficiency of 4-nitrophenol from aqueous solution by electrocoagulation. *Journal of Hazardous Materials*, **2008**, 154, 778-86	12.8	150
94	Investigation of the effect of sol□gel synthesis variables on structural and photocatalytic properties of TiO2 nanoparticles. *Desalination*, **2011**, 278, 10-17	10.3	133
93	Photooxidative degradation of Malachite Green (MG) by UV/H2O2: Influence of operational parameters and kinetic modeling. *Dyes and Pigments*, **2006**, 70, 54-59	4.6	110
92	Photodestruction of Acid Orange 7 (AO7) in aqueous solutions by UV/H2O2: influence of operational parameters. *Chemosphere*, **2004**, 55, 129-34	8.4	109
91	Investigation of the effect of different electrode connections on the removal efficiency of Tartrazine from aqueous solutions by electrocoagulation. *Dyes and Pigments*, **2007**, 74, 249-257	4.6	108
90	UV/H2O2 treatment of Rhodamine B in aqueous solution: Influence of operational parameters and kinetic modeling. *Desalination*, **2008**, 230, 16-26	10.3	108
89	Photooxidative degradation of 4-nitrophenol (4-NP) in UV/H2O2 process: influence of operational parameters and reaction mechanism. *Journal of Hazardous Materials*, **2007**, 139, 275-9	12.8	106
88	Decolorization and mineralization of C.I. Acid Yellow 23 by Fenton and photo-Fenton processes. *Dyes and Pigments*, **2007**, 73, 305-310	4.6	105
87	Synthesis of mesoporous NiO nanoparticles and their application in the adsorption of Cr(VI). *Chemical Engineering Journal*, **2014**, 239, 105-113	14.7	90
86	Ultrasonic degradation of Rhodamine B in aqueous solution: influence of operational parameters. *Journal of Hazardous Materials*, **2008**, 152, 381-6	12.8	86
85	Photocatalytic degradation of C.I. Acid Red 27 by immobilized ZnO on glass plates in continuous-mode. *Journal of Hazardous Materials*, **2007**, 140, 257-63	12.8	77
84	Silver and copper co-impregnated onto TiO2-P25 nanoparticles and its photocatalytic activity. *Chemical Engineering Journal*, **2013**, 228, 1207-1213	14.7	76
83	Study of the Effect of Additives on the Photocatalytic Degradation of a Triphenylmethane Dye in the Presence of Immobilized TiO2/NiO Nanoparticles: Artificial Neural Network Modeling. *Industrial & Engineering Chemistry Research*, **2014**, 53, 6881-6895	3.9	74

82	Effect of operational parameters on decolorization of Acid Yellow 23 from wastewater by UV irradiation using ZnO and ZnO/SnO2 photocatalysts. *Desalination*, **2011**, 271, 187-192	10.3	74
81	Ultrasonic-assisted degradation of phenazopyridine with a combination of Sm-doped ZnO nanoparticles and inorganic oxidants. *Ultrasonics Sonochemistry*, **2016**, 28, 169-177	8.9	72
80	TiO2/CeO2 Hybrid Photocatalyst with Enhanced Photocatalytic Activity: Optimization of Synthesis Variables. *Industrial & Engineering Chemistry Research*, **2014**, 53, 7847-7855	3.9	69
79	Effect of operational parameters on degradation of Malachite Green by ultrasonic irradiation. *Ultrasonics Sonochemistry*, **2008**, 15, 1009-14	8.9	63
78	Photooxidative degradation of Acid Red 27 in a tubular continuous-flow photoreactor: influence of operational parameters and mineralization products. *Journal of Hazardous Materials*, **2005**, 118, 155-60	12.8	60
77	Increasing photoactivity of titanium dioxide immobilized on glass plate with optimization of heat attachment method parameters. *Journal of Hazardous Materials*, **2008**, 160, 508-13	12.8	57
76	Kinetics of decolorization of an azo dye in UV alone and UV/H(2)O(2) processes. *Journal of Hazardous Materials*, **2006**, 136, 816-21	12.8	53
75	High-temperature stable anatase-type TiO2 nanotube arrays: A study of the structure□ctivity relationship. *Applied Catalysis B: Environmental*, **2016**, 185, 119-132	21.8	50
74	Sol-gel low-temperature synthesis of stable anatase-type TiO2 nanoparticles under different conditions and its photocatalytic activity. *Photochemistry and Photobiology*, **2011**, 87, 1002-8	3.6	50
73	UV-LEDs assisted preparation of silver deposited TiO2 catalyst bed inside microchannels as a high efficiency microphotoreactor for cleaning polluted water. *Chemical Engineering Journal*, **2015**, 270, 158-167	14.7	48
72	Minimization of electrical energy consumption in the photocatalytic reduction of Cr(VI) by using immobilized Mg, Ag co-impregnated TiO2 nanoparticles. *RSC Advances*, **2014**, 4, 28587	3.7	47
71	Photocatalytic degradation of chloramphenicol in an aqueous suspension of silver-doped TiO2 nanoparticles. *Environmental Technology (United Kingdom)*, **2013**, 34, 1161-6	2.6	46
70	Ultrasonic-assisted sol-gel synthesis of samarium, cerium co-doped TiO2 nanoparticles with enhanced sonocatalytic efficiency. *Ultrasonics Sonochemistry*, **2015**, 26, 281-292	8.9	45
69	The effect of particle size and crystal structure of titanium dioxide nanoparticles on the photocatalytic properties. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2008**, 43, 460-7	2.3	45
68	Chromium(VI) adsorption from aqueous solution by prepared biochar from Onopordom Heteracanthom. *International Journal of Environmental Science and Technology*, **2016**, 13, 1803-1814	3.3	45
67	Synthesis and characterization of high efficient photoluminescent sunlight driven photocatalyst of N-Carbon Quantum Dots. *Journal of Luminescence*, **2018**, 201, 265-274	3.8	42
66	Evaluation of electrical energy per order (EEO) with kinetic modeling on the removal of Malachite Green by US/UV/H2O2 process. *Desalination*, **2009**, 249, 99-103	10.3	41
65	Investigation of the effect of heat attachment method parameters at photocatalytic activity of immobilized ZnO nanoparticles on glass plate. *Desalination*, **2009**, 249, 1371-1376	10.3	40

64	Characterization and photocatalytic activity of Ag-Cu/TiO2 nanoparticles prepared by sol-gel method. *Journal of Nanoscience and Nanotechnology*, **2013**, 13, 548-53	1.3	39
63	Evaluation of Electrical Energy Per Order (EEO) with Kinetic Modeling on Photooxidative Degradation of C. I. Acid Orange 7 in a Tubular Continuous-Flow Photoreactor. *Industrial & Engineering Chemistry Research*, **2006**, 45, 553-557	3.9	39
62	Ultrasonic-assisted synthesis of Ce doped cubic-hexagonal ZnTiO3 with highly efficient sonocatalytic activity. *Ultrasonics Sonochemistry*, **2016**, 29, 258-69	8.9	37
61	Effects of Operational Parameters on Decolorization of C. I. Acid Red 88 by UV/H2O2 Process: Evaluation of Electrical Energy Consumption. *Clean - Soil, Air, Water*, **2012**, 40, 298-302	1.6	34
60	Synthesis of Mg-Doped TiO2 nanoparticles under different conditions and its photocatalytic activity. *Photochemistry and Photobiology*, **2011**, 87, 1308-14	3.6	34
59	Fabrication of an iron(III) PVC-membrane sensor based on bis-benzilthiocarbohydrazide as a selective sensing material. *Materials Science and Engineering C*, **2009**, 29, 1535-1539	8.3	34
58	Critical effect of hydrogen peroxide concentration in photochemical oxidative degradation of C.I. Acid Red 27 (AR27). *Chemosphere*, **2004**, 56, 895-900	8.4	34
57	Preparation of novel high performance recoverable and natural sunlight-driven nanocomposite photocatalyst of Fe3O4/C/TiO2/N-CQDs. *Materials Science in Semiconductor Processing*, **2018**, 87, 142-154	4.3	32
56	Adsorption of C.I. Acid Red 97 dye from aqueous solution onto walnut shell: kinetics, thermodynamics parameters, isotherms. *International Journal of Environmental Science and Technology*, **2015**, 12, 1401-1408	3.3	30
55	Preparation of TiO2 nanoparticles by the sol□gel method under different pH conditions and modeling of photocatalytic activity by artificial neural network. *Research on Chemical Intermediates*, **2015**, 41, 2001-2017	2.8	28
54	Investigation on adsorption capacity of TiO2-P25 nanoparticles in the removal of a mono-azo dye from aqueous solution: A comprehensive isotherm analysis. *Chemical Industry and Chemical Engineering Quarterly*, **2014**, 20, 97-107	0.7	28
53	Photo and Chemical Reduction of Copper onto Anatase-Type TiO2 Nanoparticles with Enhanced Surface Hydroxyl Groups as Efficient Visible Light Photocatalysts. *Photochemistry and Photobiology*, **2015**, 91, 797-806	3.6	27
52	Enhanced photocatalytic degradation of C.I. Basic Violet 2 using TiO2-SiO2 composite nanoparticles. *Photochemistry and Photobiology*, **2011**, 87, 795-801	3.6	26
51	Sonocatalytic degradation of Acid Red 1 by sonochemically synthesized zinc sulfide-titanium dioxide nanotubes: Optimization, kinetics and thermodynamics studies. *Journal of Cleaner Production*, **2019**, 215, 1341-1350	10.3	25
50	Enhancement photocatalytic activity of ZnO nanoparticles by silver doping with optimization of photodeposition method parameters. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2009**, 44, 666-72	2.3	24
49	Enhanced photocatalytic removal of phenazopyridine by using silver-impregnated SiO2□TiO2 nanoparticles: optimization of synthesis variables. *Research on Chemical Intermediates*, **2015**, 41, 9929-9949	2.8	22
48	Synthesis of Fe3O4@NiO core-shell nanocomposite by the precipitation method and investigation of Cr(VI) adsorption efficiency. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2018**, 538, 287-296	5.1	22
47	Synthesis of TiO2 nanoparticles in different thermal conditions and modeling its photocatalytic activity with artificial neural network. *Journal of Environmental Sciences*, **2012**, 24, 750-6	6.4	21

46	Sol-gel synthesis of Ba-doped ZnO nanoparticles with enhanced photocatalytic activity in degrading Rhodamine B under UV-A irradiation. *Optik*, **2017**, 147, 143-150	2.5	21
45	Kinetic modeling on photooxidative degradation of C.I. Acid Orange 7 in a tubular continuous-flow photoreactor. *Chemosphere*, **2006**, 62, 1543-8	8.4	21
44	Synthesis, Characterization and Photocatalytic Activity of Mg-Impregnated ZnO-SnO2 Coupled Nanoparticles. *Photochemistry and Photobiology*, **2014**, 90, 51-6	3.6	20
43	Determination of the Optimum Conditions for the Leaching of Lead from Zinc Plant Residues in NaCl□H2SO4□Ca(OH)2 Media by the Taguchi Method. *Industrial & Engineering Chemistry Research*, **2012**, 51, 3887-3894	3.9	20
42	Nonlinear regression analysis of kinetics of the photocatalytic decolorization of an azo dye in aqueous TiO2 slurry. *Photochemical and Photobiological Sciences*, **2006**, 5, 1078-81	4.2	20
41	Mg and La Co-doped ZnO Nanoparticles Prepared by Sol□gel Method: Synthesis, Characterization and Photocatalytic Activity. *Periodica Polytechnica: Chemical Engineering*, **2019**, 64, 61-74	1.3	18
40	Influence of operational parameters and kinetics analysis on the photocatalytic reduction of Cr(VI) by immobilized ZnO. *Environmental Technology (United Kingdom)*, **2012**, 33, 265-71	2.6	17
39	A comparative study of photocatalytic degradation of the antibiotic cefazolin by suspended and immobilized TiO2 nanoparticles. *Desalination and Water Treatment*, **2016**, 57, 12874-12881		15
38	Design equation with mathematical kinetic modeling for photooxidative degradation of C.I. Acid Orange 7 in an annular continuous-flow photoreactor. *Journal of Hazardous Materials*, **2009**, 165, 168-73	12.8	15
37	Mathematical Kinetic Modelling and Representing Design Equation for a Packed Photoreactor with Immobilised TiO2-P25 Nanoparticles on Glass Beads in the Removal of C.I. Acid Orange 7. *Chemical and Process Engineering - Inzynieria Chemiczna I Procesowa*, **2015**, 36, 125-133		14
36	A high-efficient batch-recirculated photoreactor packed with immobilized TiO2-P25 nanoparticles onto glass beads for photocatalytic degradation of phenazopyridine as a pharmaceutical contaminant: artificial neural network modeling. *Water Science and Technology*, **2016**, 73, 2804-14	2.2	14
35	Synthesis, characterization, and photocatalytic activity of co-doped Ag□Mg□TiO2-P25 by photodeposition and impregnation methods. *Desalination and Water Treatment*, **2016**, 57, 10451-10461		12
34	Determination of optimum conditions for removal of Acid Orange 7 in batch-recirculated photoreactor with immobilized TiO2-P25 nanoparticles by Taguchi method. *Desalination and Water Treatment*, **2015**, 56, 2417-2424		11
33	Enhancement of Removal Rate of an Organic Pollutant in the Presence of Immobilized TiO2 Nanoparticles with Inorganic Anions Combination: Optimization Using Taguchi Approach. *Industrial & Engineering Chemistry Research*, **2012**, 51, 15324-15330	3.9	11
32	Investigation of the efficiency of a tubular continuous-flow photoreactor with supported titanium dioxide nanoparticles in the removal of 4-nitrophenol: operational parameters, kinetics analysis and mineralization studies. *Water Science and Technology*, **2011**, 64, 56-62	2.2	11
31	Optimizing adsorption of Cr(VI) from aqueous solutions by NiO nanoparticles using Taguchi and response surface methods. *Water Science and Technology*, **2015**, 72, 721-9	2.2	10
30	Optimization of UV/inorganic oxidants system efficiency for photooxidative removal of an azo textile dye. *Desalination and Water Treatment*, **2015**, 55, 210-226		10
29	Visible-light-induced degradation of Rhodamine B by Ba doped ZnO nanoparticles. *Journal of Molecular Liquids*, **2020**, 315, 113633	6	10

28	Hydrothermal synthesis of mesoporous TiO2 nanotubes and their adsorption affinity toward Basic Violet 2. *Journal of Porous Materials*, **2018**, 25, 359-371	2.4	10
27	Hybrid Homogeneous and Heterogeneous Photocatalytic Processes for Removal of Triphenylmethane Dyes: Artificial Neural Network Modeling. *Clean - Soil, Air, Water*, **2016**, 44, 809-817	1.6	10
26	Sol□gel preparation and characterization of Ag and Mg co-doped nano TiO2: efficient photocatalytic degradation of C.I. Acid Red 27. *Research on Chemical Intermediates*, **2016**, 42, 595-609	2.8	9
25	Artificial neural network modeling of the influence of sol□gel synthesis variables on the photocatalytic activity of TiO2 nanoparticles in the removal of Acid Red 27. *Research on Chemical Intermediates*, **2015**, 41, 6463-6476	2.8	9
24	Photooxidative degradation of Acid Red 27 (AR27): modeling of reaction kinetic and influence of operational parameters. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2004**, 39, 2319-32	2.3	9
23	Horizontally rotating disc recirculated photoreactor with TiO-P25 nanoparticles immobilized onto a HDPE plate for photocatalytic removal of p-nitrophenol. *Environmental Technology (United Kingdom)*, **2018**, 39, 1061-1070	2.6	8
22	Enhancement of TiO2-UV100 nanoparticles photocatalytic activity by Mg impregnation in the removal of a model organic pollutant. *Desalination and Water Treatment*, **2015**, 53, 689-696		7
21	Application of response surface methodology for optimization of operational variables in photodegradation of phenazopyridine drug using TiO2/CeO2 hybrid nanoparticles. *Desalination and Water Treatment*, **2015**, 54, 3300-3310		7
20	Photooxidative Removal of Phenazopyridine by UV/H2O2 Process in a Batch Re-circulated Annular Photoreactor: Influence of Operational Parameters. *Oriental Journal of Chemistry*, **2015**, 31, 1211-1214	0.8	6
19	Synthesis, characterization, and photocatalytic activity of sol□gel prepared Mg/ZnO nanoparticles. *Desalination and Water Treatment*, **2015**, 1-7		5
18	Photocatalytic activity of Cu doped TiO2 nanoparticles and comparison of two main doping procedures. *Micro and Nano Letters*, **2013**, 8, 345-348	0.9	5
17	Intensification of Azo Dye Removal Rate in the Presence of Immobilized Nanoparticles and Inorganic Anions under UV-C Irradiation: Optimization by Response Surface Methodology. *International Journal of Photoenergy*, **2013**, 2013, 1-11	2.1	5
16	Optimization of photocatalytic activity of immobilized TiO2□P25 nanoparticles in the removal of phenazopyridine using response surface methodology. *Russian Journal of Applied Chemistry*, **2016**, 89, 1544-1551	0.8	5
15	Optimization of photooxidative removal of p-nitrophenol in a spinning disc photoreactor using response surface methodology. *Chemical Engineering Communications*, **2019**, 206, 398-408	2.2	5
14	Artificial neural network modeling of Cr(VI) photocatalytic reduction with TiO2-P25 nanoparticles using the results obtained from response surface methodology optimization. *Desalination and Water Treatment*, **2014**, 1-11		4
13	Efficiency of a Photoreactor Packed with Immobilized Titanium Dioxide Nanoparticles in the Removal of Acid Orange 7. *Water Environment Research*, **2016**, 88, 449-57	2.8	4
12	Synthesis of TiO (B) and High-temperature Stable Anatase TiO Nanowires by Hydrothermal Method and Investigation of Photocatalytic Activity. *Photochemistry and Photobiology*, **2019**, 95, 733-739	3.6	4
11	Optimization of Photooxidative Removal of Phenazopyridine from Water. *Russian Journal of Physical Chemistry A*, **2018**, 92, 876-883	0.7	2

10	Combination of Design Equation and Kinetic Modeling for a Batch-Recirculated Photoreactor at Photooxidative Removal of C.I. Acid Red 17. *International Journal of Chemical Reactor Engineering*, **2012**, 10,	1.2	2
9	The effect of operational parameters in the photocatalytic activity of synthesized Mg/ZnO-SnO2 nanoparticles. *Desalination and Water Treatment*, **2013**, 1-7		2
8	Hybridized advanced oxidation processes involving UV/H2O2/S2O 2-8 for photooxidative removal of p-nitrophenol in an annular continuous-flow photoreactor. *Kinetics and Catalysis*, **2016**, 57, 768-775	1.5	2
7	Artificial Neural Network Modelling of Photocatalytic Degradation of Diclofenac as a Pharmaceutical Contaminant. *Journal of Water Chemistry and Technology*, **2020**, 42, 252-261	0.4	1
6	A mechanistic study on photocatalytic activity of hydrothermally synthesized titanium dioxide nanowires decorated by silver phosphate. *Materials Science in Semiconductor Processing*, **2022**, 142, 106501	4.3	1
5	PHOTOCATALYTIC ACTIVITY OF Ag/TiO2-P25 MODIFIED CEMENT: OPTIMIZATION USING TAGUCHI APPROACH. *Environmental Engineering and Management Journal*, **2018**, 17, 1131-1138	0.6	1
4	Achieving the Enhanced Photocatalytic Degradation of Ceftriaxone Sodium Using CdS-g-C3N4 Nanocomposite under Visible Light Irradiation: RSM Modeling and Optimization. *Journal of Inorganic and Organometallic Polymers and Materials*, **2021**, 31, 3164	3.2	0
3	Photocatalytic Removal of RhB by Ag and Mg Co-Doped ZnO Nanoparticles: Modeling of Operational Parameters Using ANN Based on RSM Data. *Russian Journal of Physical Chemistry A*, **2019**, 93, 1769-1777	0.7	
2	Specification of the Operational Parameters Contribution in the Efficiency of TiO2-P25 Nanoparticles in the Photocatalytic Removal of Cr(VI) by Taguchi Method. *Oriental Journal of Chemistry*, **2014**, 30, 1999-2003	0.8	
1	Response Surface Methodology Optimized Sol–Gel Synthesis of Ag, Mg co-Doped ZnO Nanoparticles with High Photocatalytic Activity. *Russian Journal of Physical Chemistry A*, **2018**, 92, 2015-2024	0.7	